Remarks to Rev A
5/14/14 Made on Approved Dwg Rev A WL

Work Order ID 115362

March-27-14 9:52:28 AM

115362 PRELIMINARY ISSUE

Item ID: D5034-2
Revision ID: PRELIM
Item Name: Bubble Window

Start Date: 3/27/14 **Start Qty:** 1.00 *1*
Required Date: 4/10/14 **Req'd Qty:** 1.00 *1*
Reference:

Accept *N900040100*

Setup Start *NS1*
Stop *NS2*

Cust Item ID:
Customer:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** MLS **Date:** 14-03-27 **Tooling:** **Date:**
QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr: D5034	Revision Nbr: A. DL						x1		DL 14/04/01
100	HAND FINISHING THERMOFORMING	0.00							
100 Thermoform		0.00							
Thermoforming Machine	**Memo** Set up Clamping Frame and Load Programas per Work Instruction WI 163								
110	HAND FINISHING THERMOFORMING	0.00							
110 Thermoform		0.00					x1		BB 14/04/01
Thermoforming Machine	**Memo** Cut Blanks to 32" by 42-1/2"								

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
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☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

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Item ID: D5034-2
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Item Name: Bubble Window

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120	THERMOFORMING MACHINE	0.00							
120									
Thermoform	**Memo**	0.00							
Thermoforming Machine	Thermoform as per Dwg. D5034 and WI 163 Dwg. Rev. A WI Rev. A 1-Visually inspect part for proper formation and texture 2-Check depth of bubble					X1		B 14/03/31	
150	HAND FINISHING THERMOFORMING	0.00							
150									
Thermoform	**Memo**	0.00							
Thermoforming Machine	1) Trim off excess flange material 2) Buff out any light scratches or blemishes 3) Etch part number and batch number					X1		B 14/04/01	

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☐ Outside Dimensions
☐ Over/Under tolerance
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☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
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☐ Set-up
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
155 *155* QC Quality Control	QC6- Inspect dimensions to drawing Dimensional Inspection **Memo** Fill out Inspection Sheet Rev A	0.00 0.00					X1	14/04/01	
160 *160* QC Quality Control	QC5- Inspect part completeness to step on W/O **Memo** 1) VIsually inspect for clarity, and proper formation.	0.00 0.00					1	DAS 27 19/4/14	
170 *170* Packaging Packaging	Identify as per dwg & Stock Location:_____ Packaging **Memo**	0.00 0.00						Ship	

Inspect as per Dwg

DQA: _____ Date: _____

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180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	**Memo**	0.00							
Quality Control									

MLJ 14-06-24

MLJ 14-06-24

POSITIVE RECALL
EFFECTIVE 1103 AUTH 14-06-24
RELEASED DATE 14/06/24

To Rev A Dwg

DQA: _____ Date: _____

DART AEROSPACE

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

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Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
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Operator	☐									
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Process	☐									
Supplier	☐									
Training	☐									
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☐ Set-up
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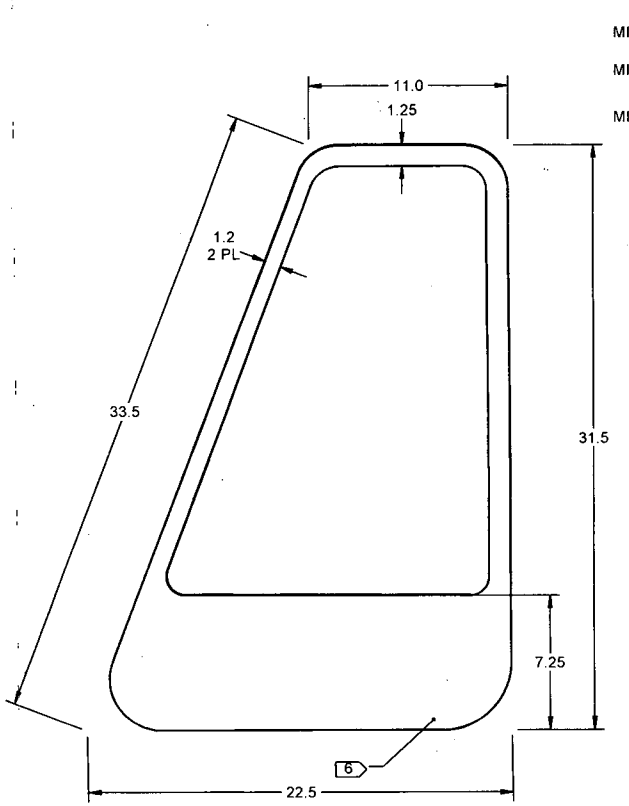
DART AEROSPACE LTD

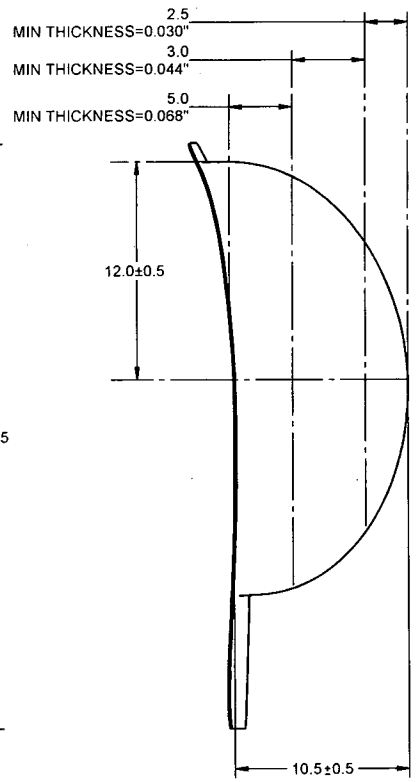
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Inspection Drawing:	D5034-2	Rev: PRELIM A	Part Number: D5034-2

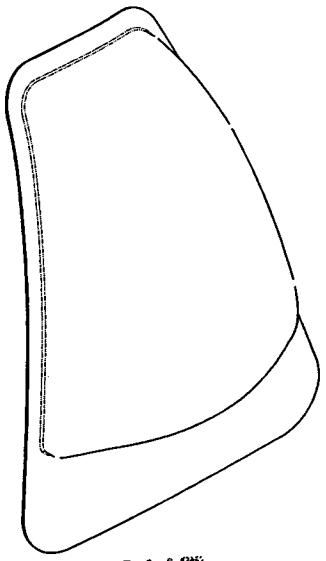
INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
10.5	+-.5	10,	✓		TH-05	
12	+-.5	11.75	✓		TH-05	
.068	MIN	.091	✓		HGTRA	
.044	MIN	.066	✓		" "	
.030	MIN	.047	✓		" "	
1.25	.100	1.30	✓		TH-05	
1.2	.030	1.30	✓		TH-05	
7.25	.100	7.30	✓		TH-05	
11.0	.030	11.1	✓		TH-05	
33.5	.030	33.5	✓		TH-05	
22.5	.030	22.625	✓		TH-05	

Measured by:	Checked By:	QC inspector:	Engineering Approval (*if necessary*):
Date 14/04/01	DAS 27 9-89 Date 14/4/1	SMP Date 14/4/1	Date







PRELIMINARY ISSUE

D5034-2 BUBBLE WINDOW

NOTES:
1) MATERIAL: PLEXIGLASS "G" CAST ACRYLIC SHEET PER LP-391 TYPE 1 GRADE C OR POLYCAST II CLEAR ACRYLIC PER MIL-P-5425 0.236 THICK (REF DART SPEC M-ACRYLIC-S.236)
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.4 WITH VIBRATING STYLUS ENGRAVE DART P/N "D5034-2" & B/N "BXXXXX" ON THE INSIDE SURFACE WITHIN 0.50" OF BOTTOM EDGE. USE 0.125" LETTERS TO MAX DEPTH OF 0.005"
7) WEIGHT: 5.2 lb s
8) THERMOFORM PART PER QSI 022 USING DT10033. TRIM PER JIG DT10035.

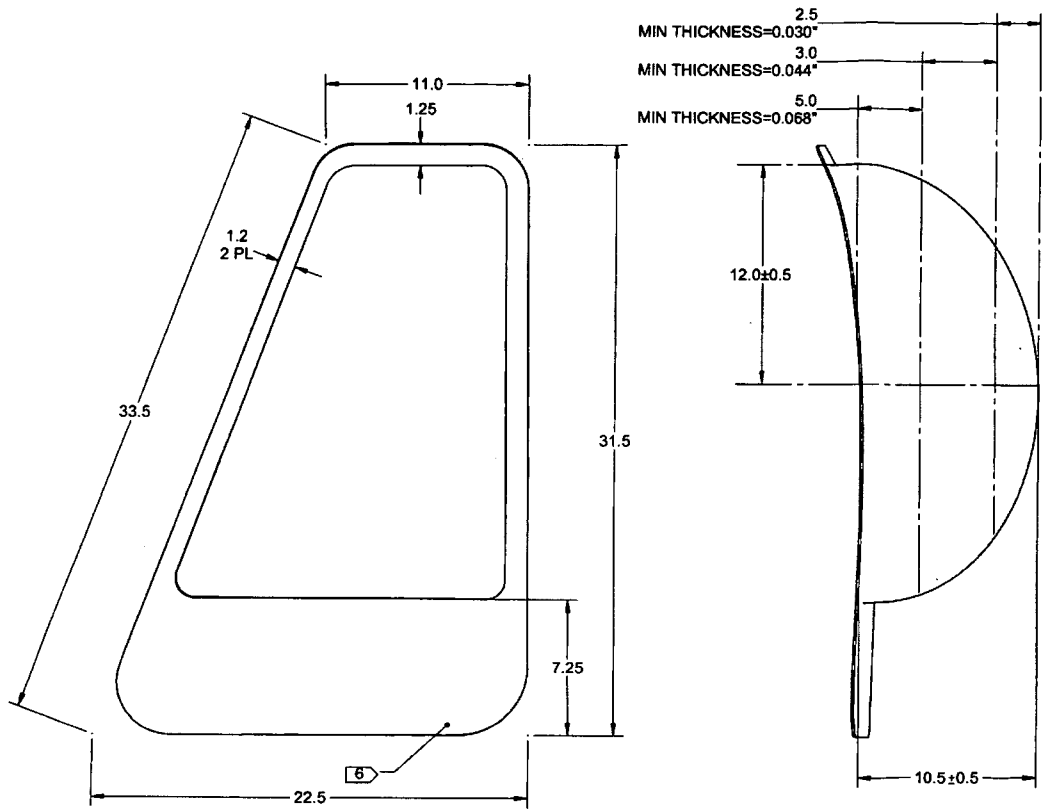
REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	DB	14.01.23

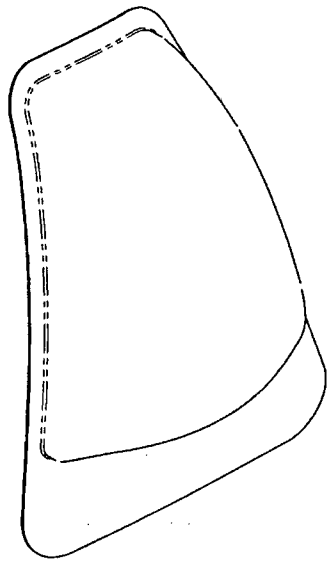
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	VS	
CHECKED	DC	DRAWING NO. D5034 REV. A
MFG. APPR.	DL	SHEET 1 OF 1
APPROVED	MP	TITLE: BK117 BUBBLE WINDOW SCALE: NTS
DE APPR.	DS	
DATE	14.01.23	

APPROVED

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This document may be out-of-date because
it has file references that may have been updated. (more...)





RELEASED
2014-06-20

D5034-2 BUBBLE WINDOW

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REV.	DESCRIPTION	BY	DATE
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CHECKED	DC	DRAWING NO. D5034 REV. A
MFG. APPR.	DL	SHEET 1 OF 1
APPROVED	MP	TITLE BK117 BUBBLE WINDOW SCALE NTS
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